### **REMARKS**

Claims 1-36 are pending in the application. Claims 1-3, 7-8, 11-12, 14, 17, 25, 31, and 34 have been amended. The Specification has been amended to overcome objections, but no new matter has been added. Reconsideration is respectfully requested. Applicants submit that the pending claims 1-36 are patentable over the art of record and allowance is respectfully requested of claims 1-36.

# A. Objections to Drawings and Specification

In paragraph 2, the Office Action objects to the drawings "because they include the following reference sign(s) not mentioned in the description: Figure 4, element 102 and Figure 5, elements 200, 202, 204, 206, 208, 214, 216, 218, 220, 222, 224, and 226." In paragraph 2, the Office Action indicates that the objections to the drawings may be overcome by amending the Specification to add the reference sign(s) in the description. Applicants have amended the Specification to overcome the objections to the drawings. No new matter has been added.

In paragraph 3, the Office Action objects to the Specification because: "Element 46 is described as both the medication schedule view . . . and the medication view." Applicants have amended the Specification to overcome the objection. No new matter has been added.

## B. Rejection Under 35 U.S.C. §101

In paragraph 5, the Office Action rejects claims 25-36 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. In paragraph 5, the Office Action indicates that the "above deficiencies may be cured by simply explicitly reciting that the claimed articles of manufacture are embodied on a computer-readable medium." Applicants' have amended claims 25-36 to overcome the rejection. Additionally, support for the amendments may be found at page 15, paragraph starting at line 2, which recites as follows:

The term "article of manufacture" (or alternatively, "computer program product") as used herein is intended to encompass one or more computer programs and/or data files

accessible from one or more computer-readable devices, carriers, or media, such as magnetic storage media, "floppy disk," CD-ROM, optical disks, holographic units, volatile or non-volatile electronic memory, etc. Further, the article of manufacture may comprise the implementation of the preferred embodiments in a transmission media, such as a network transmission line, wireless transmission media, signals propagating through space, radio waves, infrared signals, etc.

## C. Rejection Under 35 U.S.C. §112

In paragraph 7, the Office Action rejects claims 2-3, 7-8, and 2-14 under 35 U.S.C. §112, second paragraph. Applicants' have amended claims 2-3, 7-8, and 2-14 to overcome the rejection.

## D. Rejections Under 35 U.S.C. §103

In paragraph 9, the Office Action rejects claims 1-3, 6-7, 10-12, 14, 17-19, 23-26, 31-33, and 36 under 35 U.S.C. §103(a) as being unpatentable over Brown (U.S. Patent No. 6,161,095) in view of Brown (U.S. Patent No. 6,032,119). Applicants traverse these rejections for the following reasons.

Applicants' amended claim 1 recites: "generating an electronic patient data structure including patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information; and electronically transmitting the patient data structure directly between a physician computer and a portable patient device, wherein the patient data structure is capable of being modified."

The Office Action cites the Brown ('095) patent, Col. 4, line 7 as generating an electronic patient data structure. Col. 4, line 7 of the Brown ('095) patent recites "For further information regarding a data structure . . . see related application." The Brown ('095) patent does not provide details on the data structure. Therefore, the Brown ('095) cannot teach or suggest Applicants' claimed generation of "an electronic patient data structure including patient biographical

information and one of medical history information including medical event information, medication schedule information, and appointment schedule information."

Additionally, the Office Action cites the Brown ('095) patent, Col. 5, lines 8-23, as teaching that the data structure includes medical information. Col. 5, lines 8-23 indicate that "the act to be performed is related to compliance with a medication regimen . . . physical therapy regimen. . . " There is no indication in the Brown ('095) patent that this information is stored in a data structure along with Applicants' claimed "patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information."

The Office Action cites the Brown ('095) patent Col. 6, lines 8-14, as teaching that the data structure includes medical history information. Applicants medical history information includes medical event information. The Specification on page 6, lines 4-9, recites "A medical event subrecord is created upon the occurrence of a medical event, such as an illness, routine check-up or other event resulting in a consultation with a physician. Each medical event subrecord would include fields for the date of the medical event, diagnosis, prescribed medication, hospitalization, length of symptoms, outcome, treating physician, etc." On the other hand, Col. 6, lines 8-14 describe a treatment regimen. A treatment regimen is not equivalent to Applicants' medical history information including medical event information.

The Office Action cites the Brown ('095) patent, Col. 3, lines 3-5, as disclosing "the refilling and delivery of medication, which would require the use of biographical information." Although biographical information may be used to refill and deliver medication, the Brown ('095) patent does not specify that biographical information is actually used. Additionally, the Brown ('095) patent does not teach or suggest that biographical information is stored in a data structure along with medical event information, medication schedule information, and appointment schedule information.

The Office Action states that "Brown (095) does not expressly disclose the therapies to include appointments." The Office Action further cites the Brown ('119) patent as disclosing "generating a patient data structure including appointment schedule information" Figure 4-D and

5-B, Col. 6 lines 37-41. The Brown ('119) patent, at Col. 6, lines 37-41, recites "A log book (FIG. 4-D) allows the patient to access and modify... appointment and checkup schedules." The use of a log book teaches away from Applicants' claimed data structure.

Additionally, the Office Action cites Brown ('095) patent, Col. 4, lines 43-54 and Figure 3, as disclosing "electronically transmitting the patient data structure directly between a physician computer and a portable patient device." The Brown ('095) patent at Col. 4 lines 43-54 recites: "The service provider sends the treatment regimen and protocol to the server device 160 where it is recorded in the database 161. The server device 160 sends the treatment regimen and protocol information to the patient deice 110, and optionally to the pharmacist device 140 and the medical professional device 150." That is, the Brown ('095) patent describes sending information from a service provider to a server and then to the patient device and a medical professional device. This teaches away from Applicants' electronically transmitting the patient data structure directly between a physician computer and a portable patient device.

The Office Action cites the Brown ('095) patent, Col. 5, lines 24-25 as disclosing "wherein the patient data structure is capable of being modified." Col. 5, lines 24-27 recite: "The patient 111 performs the indicated act and enters a message into the portable device 112 confirming performance of the act." The Brown ('095) patent allows a patient to enter a message into a portable device, but the Brown ('095) patent does not teach or suggest Applicants' data structure or that Applicants' data structure is capable of being modified.

Therefore, claim 1 is not taught or suggested by the Brown ('095) or Brown ('119) patents, either alone or in combination.

Amended independent claims 11, 17, 25, and 31 are not taught or suggested by the Brown ('095) or Brown ('119) patents, either alone or in combination for at least the same reasons as were discussed with respect to claim 1.

In particular, amended claim 11 has the added element of "receiving the patient data structure directly from the portable patient device." The Brown ('095) patent at Col. 7, lines 40-43, recites that the "server device 160 sends the information received from the patient device 110 to the pharmacist device 140 and to the medical professional device 150 using the

communication network 130. Sending information from the server device teaches away from Applicants' claimed element of receiving the patient data structure <u>directly</u> from the portable patient device.

Moreover, amended claim 31 recites "storing an electronic patient data structure including patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information" at the portable patient device. The Office Action cites the Brown ('095) patent as teaching "the portable device (112) having memory (114)." This merely indicates that a portable device has a memory, but does not teach or suggest storing Applicants' claimed data structure in the memory of the portable device.

Dependent claims 2-3, 6-7, 10, 12, 14, 18-19, 23-24, 26, 31-33, and 36 incorporate the language of independent claims 1, 11, 17, 25, and 31, respectively, and add additional novel elements. Therefore, dependent claims 2-3, 6-7, 10, 12, 14, 18-19, 23-24, 26, 31-33, and 36 are not taught or suggested by the Brown ('095) or Brown ('119) patents, either alone or in combination for at least the same reasons as were discussed with respect to independent claim 1.

In paragraph 10, the Office Action rejects claims 4, 20, and 34 under 35 U.S.C. §103(a) as being unpatentable over Brown (U.S. Patent No. 6,161,095) and Brown (U.S. Patent No. 6,032,119) in view of Rose (U.S. Patent No. 4,695,954). Applicants traverse these rejections for the following reasons.

Dependent claims 4, 20, and 34 depend from claims 1, 17, and 31, respectively. For at least the reasons discussed above, claims 4, 20, and 34 are not taught or suggested by the Brown ('095) or Brown ('119) patents, either alone or in combination. The Rose patent does not cure the defects of the Brown ('095) or Brown ('119) patents, either alone or in combination.

The Office Action states that "Brown (095) does note expressly disclose the step of setting an alarm to activate and provide and alert of a scheduled event." The Rose patent describes "dispensing medications." (Abstract) The Rose patent at Col. 5, lines 43-48, Col. 10, lines 55-60, and Col. 11, lines 26-27, recites "medication dispenser 22 will generate alarms

indicating to the patient" and "[h]ome unit 160 preferably includes both audio and visual alarms."

Claims 4, 20, and 34, in combination with their independent claims, recite storing Applicants' claimed electronic patient data structure including patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information; electronically transmitting the patient data structure directly between a physician computer and a portable patient device, wherein the patient data structure is capable of being modified; and setting an alarm to activate to provide an alert of one scheduled patient medication or appointment.

The Rose patent merely describes an alarm, but does not overcome the defects of the Brown ('095) or Brown ('119) patents, either alone or in combination in failing to teach or suggest Applicants' claimed electronic data structure or direct transmission of the patient data structure.

Therefore, dependent claims 4, 20, and 34 are not taught or suggested by the Brown ('095) or Brown ('119) or Rose patents, either alone or in combination.

In paragraph 11, the Office Action rejects claims 5, 9, 13, 16, 21-22, 27-28, 30, and 35 under 35 U.S.C. §103(a) as being unpatentable over Brown (U.S. Patent No. 6,161,095) and Brown (U.S. Patent No. 6,032,119) in view of Ballantyne (U.S. Patent No. 5,867,821).

Applicants traverse these rejections for the following reasons.

Dependent claims 5, 9, 13, 16, 21-22, 27-28, 30, and 35 depend from claims 1, 11, 17, 25, and 31, respectively. For at least the reasons discussed above, claims 5, 9, 13, 16, 21-22, 27-28, 30, and 35 are not taught or suggested by the Brown ('095) or Brown ('119) patents, either alone or in combination. The Ballantyne patent does not cure the defects of the Brown ('095) or Brown ('119) patents, either alone or in combination.

The Office Action states that "Brown (095) and Brown (119) do not expressly disclose the step of generating log information indicating modifications to the patient data structure. The Ballantyne patent describes "distribution and administration of medical services, entertainment

services, electronic medical records, education information, etc. to a patient's individual electronic patient care station." (Abstract)

Dependent claim 5 recites "generating log information indicating modifications to information in the patient data structure, wherein the log information is read-only and once generated cannot be altered." The Ballantyne patent at Col. 2, lines 27-44 recites "the master library be adapted to store data . . . selected from one or more of the following: (a) patient/medical staff health record information . . . (i) management information data including accounting, billing and inventory control/ordering services." The master library does not teach or suggest Applicants' claimed data structure, and so the Ballantyne patent does not overcome the defects of the Brown ('095) or Brown ('119) patents, either alone or in combination.

Additionally, the Ballantyne patent at and Col. 8, lines 53-56 recites: "As well as logging the access time of each user on the network, each patient record has its own audit trail. All authorised users that access any patient record, their name and time of access are all documented (344). The patient has the right to request an access log (346) for their personal medical record or the system can initiate a timely print out(348) of all active personal medical records which is forwarded to patient for review." Ballantyne logs an access time and name of each user, which teaches away from Applicants' logging information indicating modifications to information in the patient data structure.

Moreover, the Ballantyne patent at Col. 8, lines 7-9 recites "Various levels of security access are applied to different sections of the individual's health record i.e., psychiatric data can not be accessed by the general practitioner." This does not teach or suggest that Applicants' claimed log information is read-only and once generated cannot be altered. For instance, the Ballantyne patent describes that various levels of security access prevent some data from being accessed by some users (e.g., "psychiatric data can not be accessed by the general practitioner"), but does not state the data is read-only.

Claim 9 recites that "the patient data structure further includes patient insurance billing information that can be used to generate insurance claims for patient services."

The Office Action states that "the combined teachings of Brown (095) and Brown (119) fail to expressly teach the patient data structure including insurance billing information." The Ballantyne patent at Col. 2, lines 27-44 recites "the master library be adapted to store data . . . selected from one or more of the following: (a) patient/medical staff health record information . . . (i) management information data including accounting, billing and inventory control/ordering services." Again, the master library does not teach or suggest Applicants' claimed data structure, and so the Ballantyne patent does not overcome the defects of the Brown ('095) or Brown ('119) patents, either alone or in combination.

Therefore, claims 5 and 9 are not taught or suggested by the Brown ('095) or Brown ('119) or Ballantyne patents, either alone or in combination. Claims 13, 16, 21-22, 27, 30, and 35 are not taught or suggested by the Brown ('095) or Brown ('119) or Ballantyne patents, either alone or in combination for at least the same reasons as were discussed with respect to claims 5 and 9.

Additionally, claims 14 and 28 recite adding one of appointment and medication events to the patient data structure, wherein one appointment event indicates a scheduled medical related visit and one medication event indicates a drug prescription and transmitting the modified patient data structure to the portable patient device. The Office Action recites "As per claim 28 recites the same limitations as claim 14, and is therefore, rejected for the same reason provided for that claim and incorporated herein." Applicants respectfully assert that the rejection of claim 14 was not specifically discussed. However, since the Ballantyne patent does not teach or suggest Applicants' claimed data structure, the Ballantyne patent cannot teach or suggest adding one of appointment and medication events to the patient data structure, as claimed in claims 14 and 28. Therefore, claims 14 and 28 are not taught or suggested by the Brown ('095) or Brown ('119) or Ballantyne patents, either alone or in combination.

In paragraph 12, the Office Action rejects claims 8, 15, and 29 under 35 U.S.C. §103(a) as being unpatentable over Brown (U.S. Patent No. 6,161,095) and Brown (U.S. Patent No. 6,032,119) in view of Evans (U.S. Patent No. 5,924,074). Applicants traverse these rejections for the following reasons.

Dependent claims 8, 15, and 29 depend from claims 1, 11, and 25, respectively. For at least the reasons discussed above, claims 8, 15, and 29 are not taught or suggested by the Brown ('095) or Brown ('119) patents, either alone or in combination. The Evans patent does not cure the defects of the Brown ('095) or Brown ('119) patents, either alone or in combination.

Claim 8 recites: "storing, with the physician computer, patient data structures for multiple patients; displaying, at the physician computer, an interactive schedule of patient appointments from the appointment schedule view maintained in the patient data structures, wherein appointment events are added to one patient data structure through the displayed interactive schedule of patient appointments."

The Office Action states "Brown (095) and Brown (119) do not expressly teach storing multiple patients' data structures with the physician computer." The Evans patent describes a "medical records system that creates and maintains all patient data electronically." (Abstract) The Evans patent at Col. 5, lines 8-21, recites "physicians can use a point of care system 100 to enter, access, process, analyze and annotate data from patient records. . ." Although, the Evans patent describes that physicians can get to patient records, the Evans patent does not teach or suggest Applicants' claimed data structure or storing Applicants' claimed data structure for multiple patients.

The Office Action states "the combined teachings of Brown (095) and Brown (119) do not expressly disclose the physician computer displaying an interactive schedule of patient appointments from the information stored in the patient data structure and adding an appointment to the data structure via the interactive display." The Evans patent at Col. 8, lines 29-31 recites "upon creation of a patient data structure, the patient locator 200 creates a patient data structure 210 having the PID and the patient's name." Although the Evens patent has a patient data structure, the Evans patent does not teach or suggest Applicants' claimed electronic patient data structure including patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information. Therefore, the Evans patent cannot teach or suggest an interactive schedule of patient appointments from the appointment schedule view maintained in the patient

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data structures, wherein appointment events are added to one patient data structure through the displayed interactive schedule of patient appointments.

Thus, claim 8 is not taught or suggested by the Brown ('095) or Brown ('119) or Evans patents, either alone or in combination. Claims 15 and 29 are not taught or suggested by the Brown ('095) or Brown ('119) or Evans patents, either alone or in combination, for at least the same reasons as discussed with respect to claim 8.

#### CONCLUSION

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned "Version with Markings to Show Changes Made."

For all the above reasons, Applicant submits that the pending claims 1-36 are patentable over the art of record, and allowance is requested of claims 1-36.

Applicants have not added any claims. Nonetheless, should any additional fees be required, please charge Deposit Account No. 05-0585.

The attorney of record invites the Examiner to contact her at (310) 556-7983 if the Examiner believes such contact would advance the prosecution of the case.

Dated: October 17, 2002

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#### VERSION WITH MARKINGS TO SHOW CHANGES MADE

## In the Specification:

In the specification, the following insertions are boldface type and underlined, and deletions are boldface type and enclosed in brackets.

The paragraph starting on page 8, line 13 is amended as follows.

The patient bio view 42 displays subfields from the patient ID 20 and patient bio 22 fields in the patient record 18i. The medical history view 44 displays the medical event subrecords in the medical history field 24 of the patient record. The medical history view 44 may provide horizontal and vertical scrollable bars to allow the user to selectively scroll to view all the displayed fields in each medical event subrecords and all the medical event subrecords. The medication schedule view 46 provides a calender display of a medication schedule, i.e., when to take prescribed medication, which is derived from the prescription subrecords 26a-26n in the medication schedule field 26 of the patient record 18i. Next to each scheduled medication dosage is a check box, e.g., check box 52, in which the patient can indicate that they took the scheduled dosage. Further, an alarm can be set to activate at the time of the scheduled dosage to alert the user of the scheduled event.

The paragraph starting on page 8, line 25 is amended as follows.

The medication **schedule** view 46 shows a daily schedule of when to take medicine during the indicated day. View 48 is an example of a weekly view, in which a cell for each day of a week is displayed. The cells that include a block indicate a scheduled event, such as medication to take or a doctor appointment. Selection of the blocked cell may cause the display of a daily schedule providing further details of the scheduled event. A monthly schedule would provide a grid displaying a cell for each day of the month. A marker would be placed in the cell

indicating an event scheduled for that day. Selection of the day cell would cause the display of a daily schedule providing details of scheduled events for the day.

The paragraph starting on page 10, line 17 is amended as follows.

FIG. 4 illustrates logic implemented in the patient desktop software 12 to manipulate a patient record 18*i* and, in particular, handle the display and modification of information displayed in the views 42-50. The patient desktop software 12 would display in GUI panels on the display of the patient computer 4 the data displayed in the views 42-50 described with respect to the patient PDA 2. However, when the patient computer 4 is a desktop or laptop system, it has a display that is capable of displaying more information than the patient PDA 2, and thus the layout of the views 42-50 would be different than the layout shown with views 42-50 displayed on the patient PDA 2 as shown in FIG. 3. With respect to FIG. 4, control begins at block 100 with the patient desktop software 12 establishing a communication link with a patient PDA 2 and downloading a patient record. A password may be required to access a patient record. The patient computer 4 then reads the patient record (102) over the communication link 10 into memory. Alternatively, the patient desktop software 12 may read the patient record from a storage location in the patient computer 4. After reading the patient record 18*i* into memory, the patient desktop software 12 displays (at block 104) a main menu of selectable views, such as shown in main menu view 40 in FIG. 3.

The paragraph starting on page 12, line 15 is amended as follows.

FIG. 5 illustrates logic implemented in the physician software 14 to interact with the patient PDA 2 and obtain and update a patient record 18i, and display views of the patient record. The physician software 14 performs many of the same operations as the patient desktop software 12 to interact with the patient PDA 2 and display views of the patient record 18i, with a few exceptions (blocks 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226). One

difference is that when displaying the appointment view, the physician software 14 displays (at blocks 210 and 212) appointments in the subrecords for all the patient records 18*i* in the patient database 18 as well as the appointments the current patient has with other physicians. This ensures that the physician staff member scheduling the appointment will not schedule an appointment that conflicts with appointments both the physician and patient have already made. Further, unlike the patient software 12 and 16, the physician software 14 allows the physician to modify prescription subrecords 26a-26n to electronically write patient prescriptions. In further embodiments, the physician software 14 may include the capability to digitally sign or encrypt a prescription with the physician public key so that the pharmacist can authenticate an electronic prescription within a prescription subrecord 26a-26n received from the patient PDA 2.

## In the Claims:

In the following claims, insertions are underlined, and deletions are enclosed in brackets. This response amends claims 1-3, 7-8, 11-12, 14, 17, 25, 31, and 34.

1. (Amended) A method for maintaining electronic patient medical information, comprising:

generating an electronic patient data structure including patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information; and

electronically transmitting the patient data structure <u>directly</u> between a physician computer and a portable patient device, wherein the patient data structure is capable of being modified.

2. (Amended) The method of claim 1, wherein the portable patient device includes a display, further comprising:

displaying, in the display of the portable computing device, [views of the] <u>a</u> patient medication <u>schedule view</u> and <u>an</u> appointment schedule [information] <u>view</u> stored in the patient data structure to allow the patient to review scheduled medication and appointments.

3. (Amended) The method of claim 2, further comprising:

indicating, with the portable patient device, that one scheduled patient medication <u>shown</u> in the patient medication schedule view was taken; and

storing the indication [in the patient data structure] that the patient took the scheduled <u>patient</u> medication in the patient data structure in the portable computing device.

7. (Amended) The method of claim 6, wherein the patient device includes a display, further comprising:

displaying, in the display of the patient device, [views of the] <u>a</u> patient medication <u>schedule view</u> and <u>an</u> appointment schedule [information] <u>view</u> stored in the patient data structure that were added to the patient data structure to allow the patient to review scheduled medication and appointments.

8. (Amended) The method of claim 6, further comprising:
storing, with the physician computer, patient data structures for multiple patients;
displaying, at the physician computer, an interactive schedule of patient appointments
from the appointment schedule [information] view maintained in the patient data structures,
wherein appointment events are added to one patient data structure through the displayed
interactive schedule of patient appointments.

11. (Amended) A medical information system for maintaining electronic patient medical information for use in a physician computer and a portable patient device, the physician computer comprising:

a computer readable medium including an electronic patient data structure including patient biographical information and one of medical history information including medical event information, medication schedule information, and appointment schedule information; and

at least one communication port capable of transmitting the patient data structure <u>directly</u> to the portable patient device and receiving the patient data structure <u>directly</u> from the portable patient device; and

means for modifying information in the patient data structure, wherein the modified patient data structure is capable of being transmitted to the portable patient device via the communication port.

12. (Amended) The system of claim 11, wherein the physician computer further comprises:

means for displaying [views of the] <u>a</u> patient medication <u>schedule view</u> and <u>an</u> appointment schedule [information] <u>view</u> stored in the patient data structure to allow the physician to review scheduled medication and appointments.

14. (Amended) The system of claim 12, wherein the physician computer further comprises:

means for adding one of appointment and medication events to the patient data structure, wherein one appointment event indicates a scheduled medical related visit [at] and one medication event indicates a drug prescription; and

transmitting, via the communication port, the modified patient data structure to the portable patient device.

17. (Amended) A medical information system for maintaining electronic patient medical information for use in a physician computer and a portable patient device, wherein the patient device includes:

computer readable medium including an electronic patient data structure including patient biographical information and one of medical history information <u>including medical event</u> <u>information</u>, medication schedule information, and appointment schedule information; and

at least one communication port capable for transmitting the patient data structure <u>directly</u> to the physician computer and receiving the patient data structure <u>directly</u> from the physician computer, wherein the patient data structure is capable of being modified.

25. (Amended) An article of manufacture <u>embodied on a computer-readable medium</u> for use in a medical information system to maintain electronic patient medical information for use in a physician computer and a portable patient device, the article of manufacture comprising at least one computer program capable of causing the physician computer to perform:

reading an electronic patient data structure including patient biographical information and one of medical history information <u>including medical event information</u>, medication schedule information, and appointment schedule information; and

transmitting the patient data structure <u>directly</u> to the portable patient device; receiving the patient data structure <u>directly</u> from the portable patient device; and modifying information in the patient data structure, wherein the modified patient data structure is capable of being transmitted to the portable patient device via the communication port.

31. (Amended) An article of manufacture embodied on a computer-readable medium for use in a medical information system to maintain electronic patient medical information for use in a physician computer and a portable patient device, the article of manufacture comprising at least one computer program capable of causing the portable patient device to perform:

storing an electronic patient data structure including patient biographical information and one of medical history information <u>including medical event information</u>, medication schedule information, and appointment schedule information; and

transmitting the patient data structure <u>directly</u> to the physician computer; receiving the patient data structure <u>directly</u> from the physician computer, wherein the patient data structure is capable of being modified.

34. (Amended) The article of manufacture of claim 31, further comprising setting an alarm to activate to <u>provide an</u> alert [the user] of one scheduled patient medication or appointment.